



Cornell  
**ALLIANCE FOR SCIENCE**

**Burkina Faso is moving forward with GMO research**



*Dr. Umar Traore of the National Biosafety Agency in Burkina Faso. Photo by Joseph Opoku Gakpo*

Agriculturalists in Burkina Faso say their country is still open to using the tools of biotechnology, despite the decision to stop growing genetically modified cotton.

A controversy erupted over the low quality of fiber produced by GMO ([Bt](#)) cotton, prompting a withdrawal of the seeds in 2015 after they had been in use for eight years. Some 70 percent of the nation's farmers were successfully growing Bt cotton, so the decision to halt cultivation caused an uproar. Though farmers say they are now suffering significant crop loss, despite using more pesticides, the cotton traders who control production continue to insist that farmers plant non-GMO varieties only.

But work is still ongoing to develop other GMO products in Burkina Faso, including Bt cowpea and genetically engineered sterile mosquitoes. Destruction of cowpea fields by the pod bearer pest is a major issue in Africa. More 40 percent of all cowpea produced in the sub region is damaged by pests. The Bt cowpea, which infers natural resistance without the application of pesticides, is expected to help reduce the level of destruction drastically.

Dr. Umar Traore of the National Biosafety Agency in Burkina Faso says work on the Bt cowpea is progressing steadily and the challenges with cotton production will not affect it. "Like Nigeria and Ghana, we are working on pod bearer (Maruca) resistant cowpea. This is to control the Maruca pest in parts of the country where we have high rainfall. It's a problem there... We are working on that. We have done five confined field trials (CFTs) and we will follow the commercial release in Nigeria," he noted.

"There is no linkage between these and the problem with the Bt cotton....," he added. "Bt cowpea is royalty free. The story is different from Bt cotton. Cowpea is both a staple and cash crop. It will be different from the Bt cotton."

Cowpea is an important legume in Africa, consumed by about 200 million people on the continent. The



Maruca pod borer is a major threat to cowpea production, capable of causing up to 80 percent yield loss on farms.

The African Agricultural Technology Foundation (AATF) is providing support for national research institutes in Ghana, Nigeria and Burkina Faso to move the Bt trait into local varieties in these countries as a way to boost cowpea production. The technology is being provided at no additional royalty cost to the farmers.

“One of the goals of the cowpea pod bearer resistant project is to introduce the Bt trait into farmers’ varieties after [transgenic](#) lead lines have shown proof of concept to control Maruca in cowpea,” Dr. Prince Addae, project manager of the pod bearer resistant cowpea project at AATF, said in an interview.

Traore said they are still learning the lessons that arose from the challenges with Bt cotton and that will guide the work they do with other GM crops. “We haven’t learned all the lessons from the Bt cotton case but what we learned is that we should avoid mistakes when it comes to biosafety matters. Because if it was a biosafety issue, the whole technology would have collapsed here. We are happy that it’s not a biosafety issue... What we can do as a regulator is to make sure the technology is safe....The lessons will help our work,” he said.

Traore also disclosed that work is ongoing to introduce genetically engineered mosquitoes in the country soon. “We are also doing some work on mosquitoes... to control the mosquito population to fight against the malaria. Also we have already issued permits for male sterile mosquitoes... We have issued permits for confined lab [trials]... now we are going to do controlled release,” he added.

He is predicting Burkinabes will welcome the GMO mosquitoes. “With the mosquitoes, we are trying to fight malaria. When it comes to health, people don’t have any issues with [genetic engineering](#). Malaria is killing a lot of children under five... And it is killing pregnant women too.... So there won’t be any problem with the release of GMO mosquito,” he noted.



*Farmer Bonne Tumai wants Bt cotton back. Photo by Joseph Opoku Gakpo*

Cotton farmers in Burkina Faso say they are still open to the idea of growing the Bt cotton again sometime


soon. They are asking their government and the cotton trading companies to resume work on fixing the short fiber length challenges with the Bt cotton as soon as possible. They want the crop back, saying it is more profitable.

“Last year, I didn’t get any profit from the conventional cotton,” said farmer Bonne Tumai. “This year, as a precaution, I planted maize. I am expecting a loss on the cotton field and will sell my maize to pay for the debt that cotton will bring,” he explained. He said he doesn’t want to continue getting into debt, and is looking forward to the return of Bt cotton to help him live above debt.

“The loan [from the cotton companies to buy seed, fertilizer and pesticides] has to be paid back through the group,” he added. “Those who are not able to pay, they can even take your cow to pay back. And so if you want to continue cotton production, you have pay back the loan by all means. Only GMO cotton can help do that.”

**Region:**  
[Africa](#)  
**Topic:**  
[Bt Cotton](#)  
[GMO](#)  
[GMO policy](#)  
[pesticide](#)  
[Public sector research](#)

 Recommend

 Share

Sort by Best





Join the discussion...



Stuart M. • a month ago

This is a sad story. Obviously not enough attention was paid to the fiber characteristics of the finished Bt Cotton. However, if I understand the story right, even with the inferior short fibers, the Bt Cotton was profitable for the farmers in Burkina Faso. They will probably have to stop farming cotton and grow other more profitable crops. Bt Cowpea?

 |  • Reply • Share ›

ALSO ON [HTTP://ALLIANCEFORSCIENCE.CORNELL.EDU/](http://allianceforscience.cornell.edu/)

### Police stop Ugandan students as they march in support of biosafety law

1 comment • 12 days ago

RobertWager — European NGO's are behind the anti-GMO push. Colonialism pure and simple.

### Science Cafe Nigeria advances science literacy for sustainable growth

1 comment • a month ago

RobertWager — Wonderful initiative

### Burkina Faso's GMO cotton mistakes won't be repeated in Africa, stakeholders say

11 comments • 2 months ago

JRLatham — Pinning the short fibre side-effect of a Bt crop as the fault of Burkina Faso's experienced breeders is blaming the victim.

### GMO maize safer than non-GMO alternative, scientists conclude

5 comments • 9 days ago

Charles Rader — Here's the link to this article in the Frank N. Foode twitter account: [ Meta analysis shows GE maize safer and more

- Tags:
- [Burkina Faso](#)
  - [Bt cotton](#)
  - [bt cowpea](#)
  - [pesticides](#)
  - [AATF](#)
  - [evidence](#)
  - [urgency](#)

### Share this:



[Join the Alliance](#) or [Become a Member](#)

- [Home](#) /
- [Contact Us](#) /
- [RSS Feed](#)

*Cornell University.*  
*B75 Mann Library*  
*Ithaca, NY 14853*  
[Donate](#)



.





